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MEDICAL.

For the MEDICAL AND AGRICULTURAL REGISTER.

On the uſe of cold Water; certain Diſtinctions very neceſſary to be noticed by thoſe who make uſe of it, whether internally as a Beverage, or externally as a Bath. *By Dr. J. G.* COFFIN.

DR. ADAMS,

THE directions in your 7th No. "To prevent the fatal effects of drinking cold water, or cold liquors of any kind in warm weather," ſtruck my attention as being ſingularly erroneous.

"*To avoid drinking while you are warm,*" is the firſt rule inculcated; this I conceive to be the reverſe of what ought to be enjoined. When is cold water to be drank with ſafety, pleaſure and advantage? Certainly not when the body is cold. In this ſtate it is neither agreeable nor neceſſary, except in moderate quantity, and as an article of diet by thoſe who make it their common beverage.

On the contrary, it is to be taken when the body is heated by exerciſe or morbid excitement; and the more freely in proportion to the intenſity and permanency of the heat and dryneſs of the ſkin.

The ſecond direction is, "*Drink only a ſmall quantity at once, and let it remain a ſhort time in your mouth before you ſwallow it*; or, thirdly, *waſh your hands and face, and rinſe your mouth with cold water before you drink.*" Now if in certain conditions of the ſyſtem, it is hazardous to drink cold water, as undoubtedly it is, then it is the more ſo, as theſe directions are the more exactly obeyed. A man, for inſtance, warmed by labor, and

before perſpiration has appeared, may drink cold water freely; that is to ſay, he cannot be incommoded by it, unleſs from an immoderate quantity it oppreſſes the ſtomach by its weight; or, unleſs he remains inactive after it, and in ſuch a ſituation as to cool the body too ſuddenly, and ſo far as to leave its temperature below the ſtandard of health.

As this augmented heat is the ſtate in which the greateſt quantities of cold drink can be taken with impunity and advantage, ſo is it the ſtate in which cold bathing is moſt pleaſant and uſeful. If this man, however, continuing his labor, *having perſpired freely, become cool, and being fatigued*, ſhould then indulge in a liberal uſe of cold drink, he would do it at the riſk of his life. Cold bathing would now alſo be equally injurious.

"Thus perſons heated and beginning to ſweat, often think it neceſſary to wait on the edge of the bath until they are perfectly cooled; and then, plunging into the water, feel a ſudden chilling that is alarming and dangerous. In ſuch caſes the injury is generally imputed to going into the water too warm; whereas it ariſes from going in too cold. In the early ſtages of exerciſe, before perſpiration has diſſipated the heat, and fatigue debilitated the living power, nothing is more ſafe than the cold bath. This is ſo true, that I have for ſome years conſtantly directed infirm perſons to uſe ſuch a degree of exerciſe before immerſion, as may produce ſome increaſed action in the vaſcular ſyſtem, with ſome increaſe of heat; and thus ſecure a force of reaction under the ſhock, which might not otherwiſe always take place."*

The following illuſtration is much to our purpoſe. "On the 1ſt of September, 1778, two ſtudents of Medicine at Edinburg ſet out on foot on a journey, a conſiderable part of which lay along one of the rivers of Scotland. They ſtarted by ſun-riſe, and proceeded with alarcity in the cool of the morning. At the end of eight miles, they breakfaſted, reſted one hour, and then reſumed their journey. The day grew warm as it advanced, and after a march of eight miles, they arrived heated, but not fatigued, on the banks of the river above-mentioned, about eleven in the forenoon.

"Urged by the fervor of the day, and tempted by the beauty of the ſtream, they ſtripped inſtantly and threw themſelves into the river.—The utmoſt refreſhment followed, and when they retired to the neighboring inn, this was ſucceeded by a diſpoſition to ſleep, which they indulged. In the afternoon they proceeded, and travelling ſixteen miles farther at a ſingle ſtretch, arrived at the inn where they were to ſleep, a little after ſunſet. The afternoon had been warm, and they had ſweated profuſely; but the evening was temperate, and rather cool. They had travel-

* Currie.

led for ſome miles ſlowly, and arived at the end of their journey, ſtiffened and wearied with their exerciſe. The refreſhment which they had experienced in the morning from bathing, induced one of them to repeat the experiment; and he went perfectly cool, into the ſame river, expecting to relax his limbs in the water, and afterwards to enjoy profound ſleep. The conſequences were very different.

"The Tweed, which was ſo refreſhing in the morning, now felt extremely cold; and he left the water haſtily. No genial glow ſucceeded, but a feveriſh chill remained for ſome time, with ſmall frequent pulſe, and flying pains over the body. Warm liquids and friction brought on at length conſiderable heat, and towards morning perſpiration and ſleep followed.

"Next day about noon they proceeded on foot, but the traveller who had bathed was extreemly feeble; and though they had to perform a journey of a ſingle ſtage only, as ſome part of it was difficult and mountainous, he was obliged to take the aſſiſtance of a carriage which overtook them on the road. It was ſeveral days before he recovered his uſual vigour."*

A warm bath would have been as proper and refreſhing in the evening, as the cold bath had been to theſe travellers in the forenoon.

But at this time the "Medical Reports, &c." had not appeared; and the true theory of cold and warm bathing, and water-drinking, was not underſtood. But leſt I occupy too much of your preſent No. I can only open the ſubject in this place, and refer thoſe who wiſh to become acquainted with the practice of water-drinking and bathing in all their modes of exhibition and application, in ſickneſs and in health, to the very valuable work of Dr. JAMES CURRIE, of Liverpool; where this important ſcience is treated in a moſt luminous and ſatisfactory manner.

Your friend and ſervant,

Boſton, October, 1806. J. G. COFFIN.

For the MEDICAL AND AGRICULTURAL REGISTER.

Medical Extracts No. II.

Long Life.—WHEN the various functions of the body, voluntary and involuntary motions, are performed with eaſe, and ſuffer no interruption, the body is ſaid to be in health; in a

* Currie.

contrary caſe it is diſeaſed. Conſidering the many dangers to which man is expoſed, it is ſurpriſing that he ſhould remain in health ſo long ; and our aſtoniſhment increaſes when we reflect how often he eſcapes the dangers prepared by his own hand. But parental nature frequently repairs the injury in a manner unknown to us. To ſit down ſupinely with a notion, that if the Majeſty of Heaven wills us to die, we certainly ſhall, in the uſe of means to prolong life ; and if He wills the contrary, we ſhall live, in the neglect of thoſe means, is a conduct unſcriptural and abſurd. Diſeaſe may be conſidered the conſequence of the moral or rather immoral conduct of man, in deviating from a line preſcribed by his Maker.

The powers of life may be compared to the oil in a lamp : in time they will be exhauſted : they may be ſupported or diminiſhed : when exhauſted death invariably cloſes the drama. Death from mere old age, may be compared to the extinction of the light when the oil is all conſumed ; and death from diſeaſe, to the blowing out of the light, when the oil is not all conſumed, and might have burned longer. There are laws in nature, by which man may arrive to maturity, to the ſummit of health and vigor ; and there are laws, by which his powers of life are leſſened and finally exhauſted. There are the " bounds which he cannot paſs."

In order to extend the common term of life, mankind muſt be perſuaded to return to that primeval ſtate of nature, from which, hiſtory furniſhes us almoſt incredible inſtances of longevity. The antideluvians enjoyed an uninterrupted ſtate of health ; their manner of living and vegetable diet was ſimple and not injurious. They had little need to attend to their health, as the ſeeds of diſeaſe were little ſcattered in ſuch a ſtate. We have deſerted from the ſimple mode of life, which prevailed in the primitive ages. We have acquired our improved ſtate of mental culture, by ſacrificing to it much of our bodily welfare. We are leſs accuſtomed to conſult what nature requires, with reſpect to diet, mode of life, clothing, &c. than to follow faſhions, cuſtoms, and our own diſordered inclinations.

The deſire of long life, is inherent in all animal life, and eſpecially ſo in human nature ; and the poſſibility of prolonging it was never doubted by the orientals. The circumſtances which favor the attainment of long life, are,

1. Deſcent from long lived anceſtors, or a certain bodily and mental diſpoſition to longevity.

2. A gradual growth of the faculties, both of body and mind. —Too early an exertion of the powers either of body or mind, is deſtructive. The paths of nature ſhould be followed, and

every thing which haſtens the evolutions of the natural powers, and every exertion of ſtrength diſproportionable to the ability of the individual, ſhould be avoided, as of dangerous tendency. The age of man bears a certain proportion to the growth of his various powers. The deſign of nature is that man ſhould live longer than moſt of the lower animals; he of courſe requires a longer ſpace of time to develope the faculties both of body and mind. Nature reſents every outrage committed on her treaſures, and ſeldom fails to pnniſh the tranſgreſſor with lingering diſeaſe or early diſſolution.

3. Inuring ourſelves to the habits of ſupporting and reſiſting the various impreſſions of external agency.—Man is capable of undergoing the viciſſitudes of air, weather and climate, and can digeſt any article of food, if his ſtomach has not been wantonly indulged, without minute attention to time and regularity, if his duty or employment renders it neceſſary; but he who has been brought up tenderly (as it were in a hot-houſe) or he, who has been previouſly accuſtomed to a hardy mode of life, and is ſeized with a whim of beſtowing too much attention to his health, will ſuffer from ſmall cauſes, and take cold at every change of the air, &c.

4. Moderate exerciſe both of body and mind.—This adds to the powers of life, and is greatly conducive to the object in queſtion. Equanimity, or that ſtate of mind which is not diſquieted by its own exertions, in mental reſearch or other objects, is conducive to long life. Fatigue of mind is ruinous to the body. Profound ſpeculation, where the mind is continually abſorbed in abſtruſe inquiry, exhauſts the powers of life, and brings premature old age.

5. A ſteady and equal progreſs through life.—He whom neither joy convulſes, nor melancholy corrodes, whoſe drama of life is not chequered by too ſudden viciſſitudes, may expect, with ſome probability, a long enjoyment of that life to which he has become habituated. Grief deſtroys digeſtion, and relaxes the ſyſtem. Fear weakens and diſpoſes to diſeaſe. Anger inflames, and ſometimes produces immediate death. All the paſſions, when carried to exceſs, bring on formidable diſeaſes.

6. Temperance in eating and drinking.—There is ſcarcely an inſtance of any perſon, who has attained uncommon longevity, who has not been regular in his diet and manner of living. Every one ſhould ſtudy his own conſtitution, and regulate his mode of life accordingly: he ſhould make his own experience his guide in what he finds moſt ſuitable and convenient. A ſound ſtate of digeſtion greatly favors the attainment of advanced age; and there is not a ſurer ſymptom of approaching diſſolution in aged perſons, than *complaints of indigeſtion*. Thoſe who wiſh to preſerve a ſound ſtate of digeſtion will obſerve

temperance. We are liable to commit great errors both in quantity and quality of food, but eſpecially the former; and every fatiety is an outrage on the powers of digeſtion, which is of the utmoſt conſequence to the welfare of the individual. He who eats ſlowly and moderately at ſeveral diſhes of food, will leſs injure his ſtomach, than one who eats immoderately of one or two favorite articles. We ought to eat as much as is neceſſary to ſupply the waſte ſuffered by the body, and that *ſlowly*, as the ſudden expanſion of the ſtomach is injurious, by diminiſhing the elaſticity of its fibres. He who eats ſlowly, will feel himſelf ſatisfied when he has received a due quantity; but he who ſwallows his food too quickly, without proper maſtication, will only think he has eaten enough when the food occaſions a ſenſe of weight and preſſure. *Eat of one kind of meat at one time;* but at all events eat of that diſh firſt which is the moſt palatable. This is an important rule, and he who obſerves it, is in little danger of overloading his ſtomach. Food ſhould be taken moderately, well maſticated, and with a ſerene mind: it ſhould be taken at proper intervals; early in the morning; at noon, and not protract the hour of ſupper until the time which nature points out for reſt. The moſt ſimple food is the moſt ſalubrious, and every perſon ought to attend to the effect which the various aliments produce, and judge for himſelf. Animal food, when too freely uſed, tends to a putreſcent ſtate of the fluids; and vegetable food is aceſcent, and corrects the putreſcent tendency of animal; hence about three fourths of vegetable food, and one fourth of animal, are the proper proportions; and by this due mixture we may avoid the diſeaſes ariſing from a too free uſe of either.

We ought to take drink only when nature requires, and then in ſmall quantities. The general rule may be to take about double the quantity of liquids, to the dry food; however this will not apply in all caſes, the ſeaſon, weather, cold, heat, nature of the food, and more or leſs exerciſe, require more or leſs drink at one time than at another. The ſtomach ought never to be diſtended with liquids, as is often the caſe, occaſioning a ſenſe of weight, fluctuation, &c.

Thus by inuring ourſelves to the unavoidable difficulties of life; moderate exerciſe both of body and mind; obſerving a ſteady and equal progreſs, eſpecially as it reſpects the mind, together with a ſtrict adherence to temperance, we may ſupport the powers of life until an advanced age. But he, who is like the troubled ocean, regarding neither a regular mode of life, nor the rules of temperance, will reap the fruit of his own doings, be tormented by painful diſeaſe, and perhaps his lamp will be blown out at noon.

June, 1806. G——.

AGRICULTURAL.

Egyptian Millet.

[The following papers on the introduction and cultivation of the *Egyptian Millet* into this country, were firſt publiſhed by the Maſſachuſetts Agricultural Society, the preſent year. Through the politeneſs of Mr. Webſter, the Editor has been favored with a quantity of this ſpecies of grain, a ſpecimen of which he now encloſes to each of his agents, in all the ſeveral towns where the Regiſter is circulated. In this way the ſeed will be ſcattered, and the knowledge of it diſſeminated in all the New England States. It yet remains to be determined by further experiments and obſervation, how far this ſpecies of grain may be profitably and ſucceſsfully cultivated by the people in theſe States, or whether it ſhall in part ſupercede the cultivation of oats or Indian corn, for which it ſeems it may be in ſome degree a ſubſtitute, particularly as a feed for poultry, horſes, &c. for which it is ſaid to be exceedingly good. Thoſe who may have the curioſity to ſee this ſeed, or make an experiment with it on their farms, will call on the Agents for the Regiſter in their reſpective towns. And thoſe gentlemen, who may at any time, come into the poſſeſſion of any choice or rare kind of ſeed, whether of grain or of graſs, which they may wiſh to ſee experimented upon, or, of the advantages of which being perſuaded, they may wiſh to have the bleſſings of it more extenſively enjoyed, are ſolicited to make ſome communication of it to the Editor, who ſhall, at all times be happy to adopt this method of diffuſing it extenſively abroad. Alſo, thoſes gentlemen, who, from the opportunity now preſented, ſhall be diſpoſed to make trial of the *Egyptian Millet*, are ſolicited to communicate the reſult of their experience another year.]

Portſmouth, (*N. H.*) *Dec.* 2, 1805.

DEAR SIR,

IN compliance with your requeſt, I have made inquiry of the ſeveral gentlemen in this neighborhood, who have cultivated the new ſpecies of grain, which is here generally called Jeruſalem wheat, reſpecting its hiſtory, culture, and properties, the reſult of which is :

That two years laſt ſpring a few ſeeds of a ſingular kind of grain, which were found in a crate of ware, at Exeter, were ſown in a garden there ; the novel appearance of which, in the fall of the year, attracted the attention of many, and among others, of a Mr. Goſs, of Greenland, who thinking it neceſſary to give it ſome name, called it Otaheite corn ; he procured ſome of the ſeed, and ſowed it the next year on his farm, and there Col. WALKER and his ſon ſaw it. The ſon had ſeen a deſcription of grain, called Jeruſalem wheat, cultivated in Ireland, publiſhed in the Dublin Magazine, by the Agricultural Society there, which was republiſhed in one of our papers, and concluded this to be the ſame ſpecies of grain. Col. WALKER procured of Mr. Goſs a ſmall quantity of the grain, and diſtributed it to ſeveral gentlemen of this town, who raiſed it in their gardens. Col. WALKER, on the twentieth of May,

ſowed one and a half jill in drills* two feet apart, but ſet the ſeed in the drills as thick as he would any ſmall ſeeds ; the inconvenience of which he diſcovered ſoon after it came up ; but he ſuffered it to grow notwithſtanding : the ſoil was high, dry, and gravelly, and ſome butchers, without Col. WALKER's knowledge, had buried a quantity of blood there the year before, which burnt up the grain at one end of the drills, extending nearly one quarter the length of them ; he hoed it twice to kill the weeds ; the ſtalks grew about ſix feet high. The produce which was gathered on the tenth day of October, amounts to one and a half buſhel.

Col. MOSES WOODWARD obtained about half a jill of ſeed, and ſowed two rows of it in a field, on the eighteenth day of April ; the rows were eighteen inches apart, and he dibbled† the ſeed at ſix inches diſtance, but the ſeed rotted in the ground. On the fourteenth of May, he planted in holes three feet by two and a half feet aſunder, three hundred ſixty holes in all, placing five kernels, at ſuitable diſtance, in each hole. The ground was ſtiff, hard and cold clay, covered with about two inches of ſoil near a wall, and was broke up the ſame ſpring to deſtroy the ſord, was not manured, and was hoed twice to deſtroy the weeds, but was not hilled, as in raiſing Indian corn. About three ſeeds from each hole came up, and produced generally three ſtalks apiece, which grew about ſix or ſeven feet high : the grain is formed in a head on the top of the ſtalk. He gathered on this piece twelve hundred heads, which on an average, contained one jill of ſeed. On the third of June, he planted the remainder of his ſeed ; but being injured by the drought, it did not come to maturity. Col. WOODWARD thinks the time of planting Indian corn, is the proper time of ſowing it, and that it ſhould be dibbled ſix inches apart, in drills three feet wide. The ſtalks and leaves make excellent fodder for horſes and cattle, but the value of the grain yet remains uncertain. Thoſe who pretend to have ſeen it abroad, call it by different names, and deſcribe it differently. The ſtalk and leaves bear a near reſemblance to Indian corn, and I believe it will be claſſed in that genus, rather than be accounted any ſpecies of wheat. In the deſcription of the Jeruſalem wheat, the grains are ſaid to be large

* Rows.

† *Dibbling* is a proceſs in huſbandry which conſiſts in making perpendicular holes an inch and a half or two inches deep with a ſimple inſtrument provided with a number of tines for that purpoſe, into which holes the ſeed is dropped and afterwards covered with a bruſh harrow, where this ſyſtem is extenſively practiſed. The ſame may be done in a leſs expeditious way with a ſtaff.

and round; theſe are flat like the kernel of Indian corn. Mr. CAZEAUX, the French commiſſary here, ſhewed ſome of this grain to an Iriſh gentleman, who called it the greater or larger millet, and ſaid it was common in Ireland.

One gentleman in this town has been ſo curious as to count the grains in one head, and found it to contain twenty-five hundred and fifty-four. If three of theſe heads are produced from one kernel, the increaſe is very great.

We have procured a ſmall quantity of it to be ground and bolted, and have made it into bread of different kinds, but all of them prove very ordinary. Yeaſt, or leaven, does not produce any fermentation in it; but when made into a batter and baked in thin cakes, it is palatable while warm.

I have the pleaſure of ſending you ſome of the flour, and a ſmall quantity of the grain for ſeed. If it will not anſwer for bread, it may be valuable for other purpoſes.

I am, very reſpectfully,
your moſt obedient ſervant,
NATHANIEL ADAMS.

Hon. DUDLEY A. TYNG.

Boſton, November 12, 1805.

DEAR SIR,

LAST year I obtained a head of Egyptian millet, (Holcus Dura) weighing five ounces, the grain of which weighed four ounces. This was planted in April, in the manner of Indian corn, five grains in a hill, making three hundred and eighty-nine hills. From theſe, ſeventeen hundred and two heads were cut on the firſt of October, and about fifty were broken off by the wind early in the ſeaſon. The whole produce was ſeven buſhels of fair, clean grain. Comparing it with the ſame number of hills of Indian corn, the product was rather better, but the millet does not ſpread ſo far, and might have been doubled on the ſame quantity of land; and two rows, planted in drills eight inches apart, with room for a horſe plough between the rows, proved that this would have been a better method of planting, than in hills nearly four feet apart.

When Indian corn began to be injured by the drought, the millet grew more rapidly, and not a head was blaſted. Some that was near a book, on cold wet land, was not ripe till late in October; that on warm loam was the fulleſt and largeſt, and early ripe; that on warm gravel, earlier ſtill, but not ſo large. One row I manured with plaſter of Paris in the hills,

which was only one foot high, when the other was three; a ſpoonful of plaſter was then put round each ſtalk, and in three weeks, it equalled the other in height.

It is the opinion of ſome farmers, that half an acre of good land will produce, with leſs expenſe, as much of this grain, as an acre will of barley, oats, or rye.

I ſend you a few heads, and will add ſome of the flour, when I get it from the mill; and any of your friends that are diſpoſed to try it, may have as much of the ſeed as they will plant.

I am, Sir, your humble ſervant,

R. WEBSTER.

Dr. AARON DEXTER.

TO THE AGENTS FOR THE REGISTER.

IN the bundles of this No. of the Regiſter, is incloſed a ſmall quantity of the *Egyptian Millet*, treated of in the foregoing papers. Of this you will make a careful diſtribution among thoſe in your ſeveral towns, who may have the curioſity or diſpoſition to make trial of it another year. As was before obſerved, further experiment and obſervation are neceſſary, to determine how far the cultivation of this ſpecies of grain may *profitably* become an object in American huſbandry; and the ſolicitation is again repeated of ſuch further information on this ſubject as time and opportunity ſhall offer. EDITOR.

GOOD CIDER.

Directions for making ſweet, clear Cider, that ſhall retain its fine vinous flavor, and keep good for a long time in caſks, like wine.

[From the N. Y. Commercial Advertiſer.]

THERE are perſons in this country, who have for years been in the habit of making a particular fine rich and ſweet Cider, which they ſell from ſix to ten dollars per barrel; the method of doing it they have endeavored to keep a profound ſecret.

The writer of this being acquainted with the art, is deſirous that all cider makers may profit by it; and takes this method to make it more generally known.

It is of importance in making Cider, that the mill, the preſs, and all the materials be ſweet and clean, and the ſtraw clear from muſt. To make good Cider, fruit ſhould be ripe (but not rotten) and when the apples are ground, if the juice is left in the pumice 24 hours, the Cider will be richer, ſofter, and

higher coloured ; if fruit is all of the ſame kind, it is generally thought that the Cider will be better ; as the fermentation will certainly be more regular, which is of importance. The gathering and grinding of the apples, and preſſing out the juice, is a mere manual labor, performed with very little ſkill in the operation :—but here the great art of making good Cider commences ; for as ſoon as the juice is preſſed out, nature begins to work a wonderful change in it. The juice of fruit, if left to itſelf, will undergo three diſtinct fermentations, all of which change the quality and nature of this fluid. The firſt is the Vinous ; the ſecond the Acid, which makes it hard and prepares it for vinegar : by the third it becomes putrid. The firſt fermentation is the only one the juice of apples ſhould undergo to make good Cider. It is this operation that ſeparates the filth from the juice, and leaves it a clear, ſweet, vinous liquor. To preſerve it in this ſtate is the *grand ſecret ;* this is done by fumigating it with ſulphur, which checks any further fermentation, and preſerves it in its fine vinous ſtate. It is to be wiſhed that all Cider makers would make a trial of this method ; it is attended with no expenſe, and but little trouble, and will have the deſired effect. I would recommend that the juice, as it comes from the preſs, be placed in open headed caſks or vats ; in this ſituation, it is moſt likely to undergo a proper fermentation, and the perſon attending may with great correctneſs aſcertain when this *firſt fermentation* ceaſes ; this is of great importance and muſt be particularly attended to. The fermentation is attended with a hiſſing noiſe, bubbles riſing to the ſurface and there forming a ſoft ſpungy cruſt over the liquor. When this cruſt begins to crack, and a white froth appears in the cracks level with the ſurface of the head, the fermentation is about ſtopping. At this time the liquor is in the fine genuine clear ſtate, and muſt be drawn off immediately into clean caſks ; and this is the time to fumigate it with ſulphur. To do this, take a ſtrip of canvas or rag, about two inches broad and twelve inches long, dip this into melted ſulphur, and when a few pails of worked Cider are put into the caſk, ſet this match on fire and hold it in the caſk till it is conſumed, then bung the caſk and ſhake it that the liquor may incorporate with and retain the fumes ; after this, fill the caſk and bung it up. This Cider ſhould be racked off again the latter part of February, or firſt of March ; and if not as clear as you wiſh it, put in iſinglaſs to fine it, and ſtir it well ; then put the caſk in a cool place where it will not be diſturbed, for the fining to ſettle. Cider prepared in this manner will keep ſweet for years.

It is certainly of great importance to the people of America to cultivate the fruit that is natural to the ſoil of their country, and to make the moſt of the fruit which the ſoil produces; eſpecially, when its produce is an article of value, and of great conſumption in this country.

A Lover of Good Cider.

Method of preſerving Cabbages ſo as to have them good till late in the Spring.

[From the New-England Farmer.]

MAKE a trench in the drieſt ſandy ground, nine inches wide, and of equal depth; in which, place a row of Cabbages, with the roots upwards, contiguous to each other. Fill the cavities about them with ſome dry ſtraw, and then ſhovel the earth up to the ſtalks on each ſide, almoſt as high as the roots, ſhaping it like the roof of a houſe. The Cabbages will come out in May as ſound as when they were put in, and the outter green leaves will be turned quite white. As they are not apt to keep well after they are taken out, two or three at a time may be taken as they are wanted for uſe, and the breach immediately cloſed up with ſtraw and earth as before.

Extract of an Oration delivered by Dr. MITCHILL, before the Agricultural Society of New-York, on the 10th of January 1792.

SYSTEMATIC AGRICULTURE.

"HITHERTO, the American huſbandman has cultivated a ſoil, enriched for ages by the yearly addition of a freſh ſtratum of mould. From the firſt exiſtence of vegetation upon the dry land, decayed plants have continually furniſhed a ſupply of manure, which the winds and the rain have liberally ſpread abroad. As the ſupply was annually greater than the conſumption, the earth, unexhauſted by its productions, increaſed in fertility. The thick layer of vegetable mould which covered the face of the earth was a ſtore-houſe of food for plants, and their quantity was greatly increaſed by the converſion of wood into aſhes by clearing. It is not wonderful then, that for ſome years newly cleared ſettlements ſhould abound in produce, and require little more labor than that of ploughing and reaping; for during this period the proviſion is waſting, which for centuries had been accumulating. But the time

will come, and indeed in many places now is, when the land, repeatedly wounded by the plough-ſhare, and exhauſted of its richneſs, ſhall be too weak, of itſelf, to make plants grow with their former luxuriance. This may be called THE AREA OF SYSTEMATIC AGRICULTURE, when men taking the earth from nature's hand, bare of manure, is ſo to manage and diſpoſe it artificially, that it ſhall yield him firſt a ſubſiſtence, and then an overplus to grow wealthy upon. How far art may go in this ſpecies of improvement is yet unknown, as the *ultimatum of fertility* has never yet been reached. As far as experiments have been made, we find the earth liberally affording its produce, in proportion to the labor and ſkill beſtowed in its tillage; and as the ingenuity and invention of man may increaſe to an unknown and inconſiderable degree, ſo may the improvements and arrangements of huſbandry keep pace therewith, until the moſt fruitful ſpot that now exiſts, may produce a tenfold quantity, and the land which now ſupports an hundred men, give equal enjoyment to a thouſand."

MISCELLANEOUS ARTICLES.

ARTICLE XXV.

Remedy for Bots in Horſes.

Cambden, Sept. 12th, 1806.

DR. ADAMS,

IN the 4th No. of "The Medical and Agricultural Regiſter," Dr. R. GREEN, jun. has given the "Natural Hiſtory of the Horſe-Bee, with a Variety of Experiments and Obſervations on Bots," made, hoping that they would lead to the diſcovery of ſome effectual remedy.

Mr. ISAAC HARRINGTON, of this place, who is an old Farrier, ſays "he has been many years in the habit of curing horſes of the bots with *alum water*; and, that it has never failed with him of being effectual to detach the Bots from the coats of the horſe's ſtomach, and to diſcharge them without ever hurting the horſe."

"But when the bots have worked through the coats of the ſtomach, in which caſe, the matter diſcharged from the horſe's noſe looks as if it were mixed with the contents of the ſtomach, he cannot be cured with alum water, nor any other remedy; and, if it be then given to him, he dies immediately; but, if

given before the bots have worked holes through the coats of the ſtomach, the horſe ſoon recovers, and after a few hours begins to diſcharge the bots; and, if he has worms, they alſo are brought away with the bots.

"It is the larger ſpecies of Horſe-Bee, which produces bots; the ſmaller produces only the worms.

"Half an hour before the alum water is given, in order to prepare the horſe for taking it, give him a pint of milk mixed with half a pint of molaſſes, and give it in the ſame manner as the alum water is to be given.

"For this uſe, new milk is preferred. Then, take two ounces of crude alum coarſely powdered, diſſolve it in a pint and a half of warm water, and put it into a Junk-bottle.

"Let the horſe be bridled with a ſtrong bridle, by which raiſe his noſe, and faſten it up, by tying the bridle to ſomething firm above. Then introduce the noſe of the bottle into one of his noſtrils, and pour down the alum water.

"Burnt or calcined alum or crude alum powdered and mixed with the horſe's provender, will not anſwer the purpoſe.

"If a horſe has worms only, bleed him in the mouth, (in the ſecond rib of the roof,) and give him two quarts of flax-ſeed"

Mr. HARRINGTON affirms, "he has ſaved many valuable horſes in the above manner, even when they were ſuppoſed to be loſt.

Dr. JOSEPH HUSE alſo confirms him.

JACOB PATCH.

ARTICLE XXVI,

A cheap and excellent Wine.

TO *ſix gallons* of new cider, add *two gallons* of brandy, or in that proportion. Let the brandy be well mixed with the cider, and the caſk be kept full by filling up, during the fermentation. At the end of ſix or eight weeks, you will have a liquor, which will not coſt more than about *twenty-five* cents by the gallon, poſſeſſing much the taſte and ſenſible qualities of wine, and inferior hardly to none.

N. B. We have frequently witneſſed the above proceſs, and provided the caſk be clean (if it be new it ought to be ſcalded out with hot water) the cider well made, and good, be put in a cool place and the caſk be kept full, it will ſucceed, it is preſumed, to the ſatisfaction of thoſe who may be diſpoſed to make the experiment.

ARTICLE XXVII.

Receipt for curing Hams.

[From the Trenton True American.]

For twenty-four hams, take ſix pounds of fine ſalt, three pounds of coarſe brown ſugar, or two pints of molaſſes, and one pound of ſalt-petre pounded fine; mix all theſe together, and rub every ham with the mixture, and pack them down in your caſk; let them remain five or ſix days, then unpack them, and let thoſe which were on the top, be put at the bottom of the caſk, and ſprinkle a little ſalt over them; ſo let them remain for five or ſix days, and then make a pickle that will bear an egg, and pour over till it covers them; ſo let the whole remain for one month, and they will be fit for ſmoke. For twelve hams, uſe the half of the above ingredients.

Reſult of Meteorological and other Obſervations, for September, 1806; made at DEERFIELD, WARWICK, MASON, PORTSMOUTH, and SMITHFIELD, (R. I.)—For the Medical and Agricultural Regiſter.

Spt. 1806	Mean degs. at ſun-riſe.	Mean degs. at 2 P. M.	Mean degree of the month.	Greateſt heat in the month.	Leaſt heat in the month.	Prevailing winds.	Marriages.	Births.	Deaths.
Deerfield	55	72½	65½	9,&17ds. 86°	23d day 44°	S. 15 days			2
Warwick	53	72	62½	18 83	24 36	N.W. 16 days	1	2	1
Maſon	—	—	—	18 88	11 40	N. W.			
Portſmouth	56½	67	61¾	9,17,21 80	24 42	E'dly 15 days			
Smithfield	59½	68⅔	65	18,19 81	29 51	WNW&N 17d			

WEATHER.

1ſt day, fair, cloudy, rain at even. †0,9
2 } rain, 0,95† 1,25*
3 } windy. 0,30† 3,00*
4 } fair weather,
5 } flying ☾ *laſt quarter*,
6 } clouds, ſometimes
7 } *Sunday*, †0,20
8 } overcaſt.
9 fair, ſhr. at even. thun. & light. 0,20*
10 } fair; froſt on the 11th.
11 } *Dearf.* water froze in tubs.
12 rain *New Moon.* 0,10† 1,50*
13 ſhower, thund. & light. 0,70† 0,50*
14 } *Sunday*.
15 } fair weather, the 17th a
16 } remarkably fine day;
17 } 18th a little
18 } ſmoky.
19—ſhower; 1,50* ☽ *firſt quarter*
20 } more or
21 } *Sund.*
22 } leſs of clouds
23 } and ſun-ſhine
24 } each day.
25—cloudy, ſprinkling of rain. †0,05
26 cloudy, rain †0,20 0,10*
27 cloudy, fair. *Full Moon.*
28 } *Sunday* fair.
29 } *Smith.* ſome froſt, rain † 0,10
30 rain 0,25*

Depth of water fallen in rain—*Warwick* 8,30 inches.—*Smithfield* 3,35 inches.

* Warwick. † Smithfield.

Warwick, Sept. 1806.

On the morning of the 11th, we had a hard froſt on our low lands, which deſtroyed every green thing that was ſubject to its ravages, the hills remain green. Springs and ſtreams of water are very low.

The *ſtate of health* continues favourable. WM. COBB, jr.

Smithfield, Sept. 30, 1806.

Rivers and ponds low for the ſeaſon. Graſs and other vegetables, not paſt their ſeaſon of growth, have ſhot forth with new vigor, ſince the commencement of this month; and our fields and graſs lands which were parched and dry, are now covered with a new growth of verdure. Indian corn nearly fit for harveſt. Pompions have ſucceeded well; and it is believed that potatoes will yield a good crop.

The hooping or chin cough is prevalent in ſome parts of this and the neighboring towns. A conſiderable number of caſes of fever have occurred; though it may be conſidered, in general, healthy. A SMITHFIELD SUBSCRIBER.

Deerfield, Sept. 30, 1806.

Fevers have been unuſually frequent among us the latter part of the ſummer and in this month; theſe, for about twenty-five years paſt, have been almoſt unknown in this town, but they have prevailed more or leſs in the adjacent towns, even on high grounds. Formerly fevers were pretty certain to begin their ravages in this town in the Autumnal months; in ſome ſeaſons whole families were ſwept off by this diſeaſe. E. HOYT.

N. B. "*A Smithfield Subſcriber*," whoſe favors we are happy to acknowledge, is informed that his communications, if he has no way more direct, can be made to us through the hands of Mr. HENRY CUSHING of Providence. In that caſe it will be better that they ſhould be forwarded early in the month.

CONDITIONS OF THE REGISTER.

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